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PREFACE

This annual index of Mathematical Reviews (MR) is included in CD-ROM format with each subscription and is also available separately. It is also called Volume 37 of the Index of Mathematical Papers (IMP). Volumes 6–9 of IMP are the annual indexes of MR for the years 1974–77 and are available as a set. The 1978 annual index was the first to be included with each subscription. There are cumulative author indexes to MR that cover 1940–59 (Vols. 1–20), 1960–64 (Vols. 21–28) and 1965–72 (Vols. 29–44), subject indexes for 1940–58 (Vols. 1–19) and 1959–72 (Vols. 20–44), and author and subject indexes for 1973–79 (Vols. 45–58) and 1980–84.

The classification scheme used in the present index is the 2000 Mathematics Subject Classification (MSC2000). A copy of the MSC2000 is printed in the back of the subject portion of this index.

The entries in the author, key and subject indexes are comprised of all items reviewed in MR during a given year and some items which will not be reviewed by MR but which have appeared in Current Mathematical Publications (CMP). A star (★) preceding a title indicates a book or other item that is reviewed as a whole.

Author index; separate key index

The entries in the author and key indexes give full bibliographic information. These entries are accompanied by review numbers {if available} and classification numbers; secondary classification numbers are given in parentheses. Entries are listed alphabetically by author; entries having several authors are listed in full under each author. Surnames consisting of more than one part (e.g., de Carvalho, van den Berg) are listed under the first capital letter. Collections of papers, proceedings, bibliographies, tables, etc. that are edited rather than authored are listed in the key index by title and by location of the conference, workshop, etc., when applicable. For example, the publication entitled *Asymptotic methods in stochastics* is listed under **Asymptotic methods in stochastics** and under the location of the conference. Some monographic series (e.g., American Mathematical Society Translations, Series 2) have entries under the series title in this index.

Arrangement of entries in the author and key indexes

For a given heading (i.e., the preferred name of an author, or a title), full entries are listed in order of nominal publication dates; the cross-references are in MR number order after the full entries. The arrangement of each entry is the same as in the heading of its review in MR. The general form for entries is as follows:

Books, Monographs. (Coauthors {if necessary}) ★Title. (Language of original {if necessary}. Summary languages {if necessary}) [English translation of title or corrected title {if necessary}] Miscellaneous information {edition, editors, translators, series, etc.}. Publisher, city, date. Pagination. ISBN. (Reviewer's name) Review number {if available} Primary classification (Secondary classifications {if necessary}).

Journal article. (Coauthors {if necessary}) Title of article {in English translation if the original title is not in English, French or German}. (Language of original {if necessary}. Summary languages {if necessary}) [English translation of title or corrected title {if necessary}] Journal abbreviation {including series number if necessary} Volume number(volume number in first series {if given}) (nominal date), issue number {if necessary}, pagination (imprint date {if necessary}). (Reviewer's name) Review number {if available} Primary classification (Secondary classifications {if necessary}).

The first five digits of the review number of an item refer to the MR issue in which the review is published and the last five digits refer to its position within that issue. The first two digits after the colon are the general subject classification of the item.

Subject index

The entries in the subject index are arranged in classification order. For a given classification, all entries with that classification as a primary appear first, with authored entries appearing before unauthored entries. These are followed by entries with that classification as a secondary. Again, authored entries appear before unauthored entries. Each section under a given classification is arranged in alphabetical order. For each entry, the author(s), title, language, translated title {if necessary} and the review number {if available} appear at the first author only. The entries for subsequent authors are cross-references to the first author. Complete bibliographic information is available in the annual author and key indexes as well as in the MR review.

Cross-references

There are four kinds of cross-references in these indexes:

Name variations. An author's preferred name is the variation of the name that MR has chosen on the basis of frequency and currency of usage. Items by a given author are usually listed under the author's preferred name. In the author index, cross-references to the preferred form are given from sufficiently distinct alternative forms of the author's name.

Authors in other capacities. In the author index, the names of persons associated with an item in a capacity other than that of author (e.g., editor, translator, subject of a biography, etc.) are also listed. In the subject index, such names appear in parentheses. In both indexes these items occur only as cross-references to complete listings.

Key entries. Cross-references for such entries as bibliographies, obituaries and references to special events are made to the authors of the papers in which these items appear, e.g. **Biography: Frege, Gottlob Friedrich Ludwig** *see* **Kreiser, Lothar, 2005f:01015**.

Unreviewed entries. Some entries in these indexes have not been reviewed in MR (e.g., items that do not appear to be in final form, or that are at the fringes of MR's scope) although they have been listed in CMP. Unreviewed items appear in the author, key and subject indexes in a format similar to that of reviewed items. For unreviewed items that are part of a collection, the review number in parentheses is a cross-reference to the table-of-contents review, i.e. (see 2005x:xxxxx) or (2005x:xxxxx). For unreviewed items that are not part of a collection, there is no review number cross-reference.

Transliteration

Since 1983, MR has used the Cyrillic transliteration in use by ANSI, LC, Zbl, ISI, and others. This is also the system used throughout this index. A Cyrillic transliteration table appears at the end of the author/key index.

Names of Chinese authors

The name of a Chinese author appears in the index in Western form. For example, Yao Luo Gen will be listed as Yao, Luo Gen, as though the author's name were Luo Gen Yao. The pinyin transliteration is used for mainland Chinese authors and the Wade-Giles transliteration is used for Taiwanese authors.

In an undertaking of this size, errors are inevitable, despite elaborate precautions and checks. The editors of Mathematical Reviews would be very glad to have their attention drawn to errors in this index and also in the earlier indexes.

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Aadland, David (*with* Huang, Kevin X. D.) Consistent high-frequency calibration. (English summary) *J. Econom. Dynam. Control* **28** (2004), *no.* 11, 2277–2295. 91B64

rastgaar Aagaah, M. *see* **Rastgaar Aagaah, M.**

Aagaard, Lars (*with* Haagerup, Uffe) Moment formulas for the quasi-nilpotent DT-operator. (English summary) *Internat. J. Math.* **15** (2004), *no.* 6, 581–628. (Michael V. Anshelevich) **2005k:46174** 46L54 (15A52, 46L10)

— The non-microstates free entropy dimension of DT-operators. (English summary) *J. Funct. Anal.* **213** (2004), *no.* 1, 176–205. (Dimitri Y. Shlyakhtenko) **2005c:46092** 46L54 (46L60)

Aakvik, Arild (*with* Heckman, James J.; Vytlacil, Edward J.) Estimating treatment effects for discrete outcomes when responses to treatment vary: an application to Norwegian vocational rehabilitation programs. (English summary) *J. Econometrics* **125** (2005), *no.* 1-2, 15–51. 62–07 (62P20)

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— (*with* Gjessing, Håkon K.) Survival models based on the Ornstein-Uhlenbeck process. (English summary) *Lifetime Data Anal.* **10** (2004), *no.* 4, 407–423 (2005). (Summary) **2005i:62141** 62N05 (62P05)

— (*with* Lauritzen, Steffen L.) Discussion on causality. Comment on: "Direct and indirect causal effects via potential outcomes" [Scand. J. Statist. **31** (2004), no. 2, 161–170; MR2066246 (2005d:62012)] by D. B. Rubin and "Causal reasoning from longitudinal data" [ibid., 171–187; MR2066247 (2005e:60006)] by E. Arjas and J. Parner. (English summary) With a reply by Rubin and Arjas. *Scand. J. Statist.* **31** (2004), *no.* 2, 189–201. (A. I. Dale) **2005e:60007** 60A05 (62A01)

— (*with* Moger, Tron Anders) A distribution for multivariate frailty based on the compound Poisson distribution with random scale. (English summary) *Lifetime Data Anal.* **11** (2005), *no.* 1, 41–59. 62N05 (62E10)

Aalto, Samuli (*with* Ayesta, Urtzi; Nyberg-Oksanen, Eeva) $M/G/1/MLPS$ compared to $M/G/1/PS$. (English summary) *Oper. Res. Lett.* **33** (2005), *no.* 5, 519–524. (Summary) **2005m:90019** 90B22 (60K25)

Aamo, Ole Morten (*with* Krstić, Miroslav; Bewley, Thomas R.) Control of mixing by boundary feedback in 2D channel flow. (English summary) *Automatica J. IFAC* **39** (2003), *no.* 9, 1597–1606. 93C20 (76D55)

— (*with* Krstić, Miroslav) Global stabilization of a nonlinear Ginzburg-Landau model of vortex shedding. (English summary) With discussion by Gregory Hagen. *Eur. J. Control* **10** (2004), *no.* 2, 105–118. (Summary) **2005m:93119** 93D15 (76D55, 76E30, 93C20)

Aamri, Mohamed (*with* EL Moutawakil, Driss) Some new results on common fixed points in certain topological spaces. (English summary) *Rev. Colombiana Mat.* **36** (2002), *no.* 2, 59–66. (Livia D'Apuzzo) **2005a:47100** 47H10

— (*with* EL Moutawakil, Driss) τ-distance in a general topological space (X, τ) with application to fixed point theory. (English summary) *Southwest J. Pure Appl. Math.* **2003**, *no.* 2, 1–6 (*electronic*). (Liaqat Ali Khan) **2005d:54002** 54A05 (47H10, 54E70, 54H25)

— (*with* EL Moutawakil, Driss) Common fixed point theorems for E-contractive or E-expansive maps in uniform spaces. (English summary) *Acta Math. Acad. Paedagog. Nyházi. (N.S.)* **20** (2004), *no.* 1, 83–91 (*electronic*). 54H25 (54E15)

— (*with* Bassou, Abdelhafid; EL Moutawakil, Driss) Common fixed points for weakly compatible maps in symmetric spaces with application to probabilistic spaces. (English summary) *Appl. Math. E-Notes* **5** (2005), 171–175 (*electronic*). 54H25 (47H10)

— (*with* EL Moutawakil, Driss) Weak compatibility and common fixed point theorems for A-contractive and E-expansive maps in uniform spaces. (English summary) *Serdica Math. J.* **31** (2005), *no.* 1-2, 75–86. 54E15 (47H10, 54H25)

Aarão, Jorge Forward-backward diffusion with continuous spectrum. (English summary) *Turkish J. Math.* **29** (2005), *no.* 1, 23–37. (Summary) **2005i:35138** 35K57

Aardal, Karen (*with* Lenstra, Arjen K.) Hard equality constrained integer knapsacks. (English summary) *Integer programming and combinatorial optimization*, 350–366, *Lecture Notes in Comput. Sci.*, 2337, *Springer, Berlin*, 2002. (*see* **2005a:90006**) 90C10 (90C27)

— Lattice basis reduction in optimization: selected topics. (English summary) *Trends in optimization*, 1–19, *Proc. Sympos. Appl. Math.*, 61, *Amer. Math. Soc., Providence, RI*, 2004. (Summary) **2005g:90084** 90C10 (11H06, 68Q25)

— Comments on the paper: "Attacking the market split problem with lattice point enumeration" [J. Comb. Optim. **6** (2002), no. 1, 5–16; MR1880728 (2002m:90047)] by A. Wassermann. (English summary) *J. Comb. Optim.* **8** (2004), *no.* 2, 147–149. 90C10 (90C08)

— (*with* Lenstra, Arjen K.) Hard equality constrained integer knapsacks. (English summary) *Math. Oper. Res.* **29** (2004), *no.* 3, 724–738. (Summary) **2005g:90085** 90C10 (11Y50)

Aarnes, Jørg E. On the use of a mixed multiscale finite element method for greater flexibility and increased speed or improved accuracy in reservoir simulation. (English summary) *Multiscale Model. Simul.* **2** (2004), *no.* 3, 421–439 (*electronic*). (Summary) **2005g:76112** 76S05 (76M10)

Aaronson, J. (*with* Denker, Manfred; Sarig, Omri; Zweimüller, Roland) Aperiodicity of cocycles and conditional local limit theorems. (English summary) *Stoch. Dyn.* **4** (2004), *no.* 1, 31–62. (Karma Dajani) **2005e:37015** 37A50 (37A20, 37A45, 60F99)

Aaronson, Scott Quantum lower bound for the collision problem. (English summary) *Proceedings of the Thirty-Fourth Annual ACM Symposium on Theory of Computing*, 635–642 (*electronic*), *ACM, New York*, 2002. (*see* **2005i:68004**) 68Q05 (68Q17, 81P68)

— Is P versus NP formally independent? (English summary) *Bull. Eur. Assoc. Theor. Comput. Sci. EATCS No.* 81 (2003), 109–136. 68Q15 (03A05, 03E35)

— Quantum lower bound for recursive Fourier sampling. (English summary) *Quantum Inf. Comput.* **3** (2003), *no.* 2, 165–174. (Summary) **2005b:81024** 81P68 (68Q05)

— Algorithms for Boolean function query properties. (English summary) *SIAM J. Comput.* **32** (2003), *no.* 5, 1140–1157 (*electronic*). (Bruce Edward Litow) **2005b:68116** 68Q25 (68Q10, 68Q17, 81P68)

— Multilinear formulas and skepticism of quantum computing. (English summary) *Proceedings of the 36th Annual ACM Symposium on Theory of Computing*, 118–127 (*electronic*), *ACM, New York*, 2004. (Summary) **2005j:81030** 81P68 (68Q05)

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khʷāja naṣīr al-Dīn al-Ṭūsī *see* **Khʷāja Naṣīr al-Dīn al-Ṭūsī**
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